

FORT MCCOY, BUILDING T-1463 (MAINTENANCE SHOP)
(Camp McCoy, Building T-1463 (Maintenance Shop))
Fort McCoy
Sparta vicinity
Monroe County
Wisconsin

HABS NO. WI-308-E

HABS
WIS,
41-SPAR.V,
1-E-

PHOTOGRAPHS AND
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Department of the Interior
Washington, D.C. 20013-7127

HISTORIC AMERICAN BUILDINGS SURVEY

HABS
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FORT McCOY, BUILDING T-1463 (MAINTENANCE SHOP)
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Location: Building T-1463 is located approximately 200' south of South Tenth Avenue in the USAR Equipment Pool Compound, in Block 14 of the cantonment of the Main Post of Fort McCoy, in Monroe County, Wisconsin.¹

USGS Quadrangle Alderwood Lake, Wisconsin; 7.5 minute series 1983 (photorevised from 1978) UTM Coordinates: Zone 15. 4875940 N 686040 E

Present Owner: Department of the Army

Original Use: Maintenance Shop General Purpose Type MRS-1

Present Use: Unknown

Significance: Building T-1463 is significant as a relatively unmodified representative of a maintenance shop. It represents the only 800 series MRS-1 structure constructed at Fort McCoy in 1942.² The trusses in Building T-1463 have a history of failure and the structure is scheduled for demolition.

PART I. HISTORICAL INFORMATION:

A. Physical History:

1. Date of Erection: Construction of Building T-1463 probably began in the summer or fall of 1942. There is a minor discrepancy on the date of building completion. Notations on the "As Built" drawing 800-959 state that the building was completed by December 3, 1942.³ However the Real Property Records on file in Buildings T-2160 and T-2145 note the building as completed on October 3, 1942.⁴
2. Architect: George E. Bergstrom, Chief of the Architectural Unit in the Engineering Branch of the Construction Division, Quartermaster Corps, supervised the 1941 revision of the 700 series maintenance shop plans that produced the 800-959 series drawings in April 1941.⁵
3. Original and subsequent owners: The site for the expanded Camp McCoy military reservation was condemned and purchased by the War Department in the spring of 1942.⁶ The owner from 1942-47 was the War Department. Since 1947, the U.S. Department of the Army, the successor to the War Department has held title.

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4. Builder, contractor, suppliers: Building T-1463 was part of construction area B at Fort McCoy. Bids for the construction of the cantonment were let in February 1942 and contracts were awarded in late March. The contracts for the seven principal construction areas were fixed-price in nature. The War Department purchased the lumber used in Building T-1463 and the rest of the cantonment in the spring of 1942. The remaining materials used in construction were apparently purchased by subcontractors in the Wisconsin area.⁷
5. Original Plans and Construction: Building T-1463 was built from 800 series plan number 800-959 and associated plan numbers 800-960, 800-961, 800-962, 800-963, 800-964, 800-965, 800-966, 800-967, 800-967.1, and 800-968.⁸ The original plans used to construct Building T-1463 are currently on file in "As Built" envelope #196 in Building T-2111. The original cost of the building was \$79,338.⁹ Noted alterations to the original building plan at the time of construction include the use of steel reinforcement in footings and piers, the omission of two concrete ramps at the east and west elevations, and the use of gypsum board to cover the walls and trusses in the boiler room.¹⁰
6. Alterations and additions: Alterations to the original plan, as noted above, include the use of steel reinforcement in the structure footings and piers, the omission of concrete ramps from the east and west elevations and the use of gypsum board rather than wall board to cover the walls and trusses in the boiler room. The following changes have been made to the structure since construction. An Allis Chalmers Exhaust Fan was installed in October 1942.¹¹ On the exterior, the grayish white cement asbestos siding has been replaced in many areas with white siding of similar size and wavy texture at various undocumented dates. The building eaves were extended and repaired, a sprinkler system was installed and the exterior and interior office were repainted in 1951. The office floor was repainted in 1953 and the exterior was repainted in 1959 and 1965.¹² In 1972, a booster fan was added to the air intake in the paint shop. The structure was rewired, 130 fluorescent fixtures added, and eleven of the fifteen roof trusses were repaired in 1974. Also at this time, all obsolete wiring and fixtures were removed from the building. Four electric hoists were installed in 1974.¹³ Insulation was added to the roof in 1979 and the sidewalls in 1980. The coal furnace was converted to burn wood pellets and a pellet bin was installed on the south in 1982. Two exhaust fans were added in 1982 and the paint room was upgraded in 1987. The upgrade to the paint room included the installation of a King Air Systems exhaust fan and two canopies on the north.¹⁴ The roof was upgraded with asphalt shingles and new flashing, and aluminum storm windows were added to the first tier of windows at an unknown date.

B. Historical Context:

The construction of Building T-1463 was part of a massive, nation-wide mobilization program designed to build cantonments to house and train the expanded World War II

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Army. The 800 series, and the 700 series that preceded it, was a comprehensive set of drawings which could be used interchangeably in creating the various building types. Through the construction of temporary wood-frame buildings such as T-1463, the 1939 housing capacity of 200,000 was increased to 6,000,000 by the close of the mobilization program in the fall of 1944. In addition, war mobilization buildings are significant for their construction and technological innovation. Techniques such as the standardization of plans, prefabrication of units and assembly-line approach to construction were largely developed in the construction of these mobilization buildings.

Building T-1463 was the only type MRS-1 Motor Repair Shop constructed in the main cantonment area of the "New Camp McCoy," a mobilization cantonment built by the War Department between the entrance of the United States into World War II late in 1941 and early 1943.¹⁵ The 1941-43 cantonments were constructed to house and serve as training bases for approximately 525,000 men drafted for Army service after the declaration of war.¹⁶ Two newly organized Army Divisions occupied Camp McCoy during their training. The Second Army Division arrived soon after the completion of construction in the fall of 1942 and remained until November 1943, leaving for action in the Italian Campaign. The 76th Division then took over, remaining until December 1944, when they departed for service in the Battle of the Bulge and the subsequent occupation of Germany. Additionally, engineer, railhead, field artillery, tank destroyer, ordnance, and maintenance troops were trained at Camp McCoy concurrently with the Second and 76th Divisions.¹⁷ In 1944, Camp McCoy also became a personnel center for the Army, receiving and redirecting soldiers for new assignments. The following year the personnel center began also to discharge veterans as the war came to a close. The personnel center closed in 1946, and most other functions of the camp halted a year later.¹⁸

After three years of relative inactivity, Camp McCoy was reactivated by the Defense Department for training of Regular, Reserve, and National Guard Units in the Fifth Army Area for service in the Korean War. Since 1953 the camp has become a center for training reserve units of the Army and National Guard Regiments of the Midwest Region.¹⁹

Building T-1463 was assigned to the Second Division on November 11, 1942. On November 24, 1943 the building was reassigned to the 76th Division. The Engineering Division was assigned to the structure until July 2, 1946 when T-1463 was assigned to "Task Force Frost." Task Force Frost was relieved on 4 June 1947. No additional data on the building occupants were available.²⁰

PART II. ARCHITECTURAL INFORMATION:

A. General Statement:

1. Architectural Character: Externally, Building T-1463 is a well preserved, relatively unmodified example of a typical 800 series, Motor Repair Shop. The

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massing of the building is long and rectangular with a footprint of approximately 240' x 74'. The height to the eave is approximately 20'. The long sides are organized into fourteen bays of 15'-0" each. A significantly tall chimney at one end provides vertical counterpoint. Building T-1463 uses the same type of truss as the Theater Building T-1551.

2. Condition of Fabric: The general condition of Building T-1463 is moderate to poor. Areas of deterioration noted in the structure exterior include places where the original cement asbestos siding has fallen off and either been replaced or left bare and areas where the siding has been broken through for truss repair. The exterior paint is peeling and some warping and wood rot was observed where the end grains of beams have been exposed to moisture. One complete eight-over-eight-light double-hung sash window frame has been removed on the south wall. The roof truss for the structure was repaired in 1976 for cracks in all of the fifteen roof trusses. In all, twenty-six cracks in Truss Nos. 1 through 15 were repaired.²¹

B. Description of the Exterior:

1. Overall Dimensions: Building T-1463 is rectangular in shape and measures approximately 240' in length and 76' in width. The height from grade to the roof ridge is 22'-10-3/4".²²
2. Foundations: Building T-1463 has a 1'-1" wide x 8" high reinforced-concrete strip footing with a 9" wide reinforced-concrete skirt. 1/2" steel rods are used at 9" on-center horizontally and 18" on-center vertically for reinforcement in the skirt. 15" x 18" reinforced concrete piers transfer column loads to 5'-0" wide x 3'-6" long x 1'-4" deep reinforced concrete pad footing. The outside face of the piers are flush with the outside face of the skirting. The piers are reinforced with 6-3/4" steel bars vertically and wrapped with 3/8" ties 12" on-center placed 2" from each face. The pad footing is reinforced with 9-1/2" bars each way, placed 4" from the bottom.
3. Walls: The exterior walls of Building T-1463 consist of three layers: wooden sheathing, black construction paper, and cement asbestos siding measuring 11" x 24", the standard size used throughout the cantonment.
4. Structural System, framing: Building T-1463 is of light frame construction. The roof is supported by a wood Pratt truss with a top chord pitched at a 1 to 12 slope to the outside edge. The depth of the truss is approximately 6' at the edge and 9'-1" at the center with a ten-panel division through the entire length. The bottom chord is composed of two 3" x 10" members and the top chord is composed of two 3" x 12" members. The vertical web members vary in size. Two 2" x 12" members complete the first panel, two 2" x 10" members complete the second, two 2" x 8" members the third, two 2" x 6" members the fourth and a 3/4" diameter steel rod in the center king-post position. The

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diagonal members vary in an analogous manner. All connections are made with 4" split rings fastened with 3/4" diameter bolts and 3" x 3/16" washers. Three 3" x 14" planks compose the vertical end member of the truss, transferring the loads to the foundation. Wood columns supporting every other truss in the open area at the third panel point from each side were added at an unknown date.

5. Chimneys: The chimney is located outside the boiler room and rises approximately 65' above grade. The chimney is constructed of red-buff brick in a running bond with Portland cement mortar. When in use the chimney served as exhaust for the fumes emitted from the coal-burning furnace.
6. Openings:
 - a. Doorways and Doors: At the east side there is a single four-light three-panel door used for personnel entry and two, 12'-0" x 12'-0" doors for vehicle entry. On the west and north, there are single, four-light three-panel doors with canopies used for personnel entry and one, 12'-0" x 12'-0" sliding door for vehicle entry. There are no entrances to the south.
 - b. Windows: On the east and west, there is a set of three, fixed sixteen-light windows with three, fixed eight-light windows directly overhead. On the south and north, the pattern is repeated every 18'-0" with an additional set of three, fixed eight-light windows overhead.

C. Description of the Interior:

1. Floor Plans:
 - a. Basement: There is no basement under Building T-1463.
 - b. Main Floor: Building T-1463, as constructed in 1942, had a total square footage of 18,270. There are twelve divisions or rooms in the building; welding shop, testing area, office, tool shop, men's latrine, women's latrine, paint shop, cleaning bay, machine shop, vehicle bays, the main shop area and the boiler room.
 - c. Attic: The structure does not have an attic.
2. Stairways: There are no stairways in Building T-1463.
3. Flooring: The flooring consist of concrete slabs with drains. The interior partition walls are set upon a 6" concrete curb.
4. Wall and Ceiling finishes: The ceiling is not finished. The office and latrines in the southwest area of the shop are finished on the outside with wood siding

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and painted to a height of approximately 6'. The paint shop is finished with painted wall board. All other partitions are finished on one side with wood siding.

5. Openings: Interior doors that date to the time of construction are four-light, three-panel types.
6. Decorative Trim: None.
7. Hardware: The original galvanized metal knobs and rim locks survive on all remaining exterior and interior doors that date to the time of construction. The original hardware on all of the fixed windows also remains. The original hardware listing for the building includes the following equipment: hydraulic press, two electric hack saws, 12" and 24" shapers, four grinders, three lathes, valve grinder, brake drum lathe, honing machine, forge, steam cleaner and air compressor.²³ The original plumbing is intact. All original electrical equipment and fixtures have been removed.
8. Mechanical Equipment:
 - a. Heating: The structure was originally heated by a "Kewanee" coal fired steam boiler. Heat was dissipated via 14-unit heaters suspended from the ceiling trusses.²⁴
 - b. Ventilation: The building is vented through exhaust fans and louvers to the north and east. There are also metal ventilators on the roof of the structure.
 - c. Lighting: All original electrical equipment and fixtures have been removed.
 - d. Plumbing: The original cast-iron plumbing fixtures remain in both toilet rooms.

D. Site:

1. General setting and orientation: Building T-1463, and the other buildings of Block 14, are arranged in a rectangular pattern running generally south southwest to north-northeast along its long axis. The building is south of Tenth Avenue in the USAR Equipment Pool Compound. Three warehouses are located immediately north of the structure and a gravel parking lot for the Motor Pool is located immediately south of the structure. The entire compound is fenced in barbed wire. An asphalt parking lot is situated outside the compound to the east.²⁵

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2. Historical Landscape Design: To the east of the building there is an asphalt parking lot. A gravel parking lot for the Motor Pool is located immediately south of the structure. The entire compound is fenced in barbed wire. The remainder of the building lot is relatively flat and graveled.

PART III. SOURCES OF INFORMATION:

- A. Architectural Drawings: Building 1463 was built from 800 series plan numbers 800-959, 800-960, 800-961, 800-962, 800-963, 800-964, 800-965, 800-966, 800-967, 800-967.1, and 800-968.
- B. Bibliography:
 1. Primary and unpublished sources:
 - a. Standard Mobilization Drawings 800 Series Plan numbers 800-959, 800-960, 800-961, 800-962, 800-963, 800-964, 800-965, 800-966, 800-967, 800-967.1, and 800-968.
 - b. Office of the Area Engineer, Camp McCoy, Wisconsin. "Camp McCoy Project -- General Layout Plan No. 6150-L, May 23, 1942.
 - c. Record Drawing file #196 in "As Built Files, Building T-2111, Fort McCoy, Wisconsin.
 - d. Real Property Record. Building and Structures, Building T-2145, Fort McCoy, Wisconsin.
 2. Secondary and Published sources:

"As Built" file # 196, Building T-2111, Fort McCoy, Wisconsin

Basic Information Map, Fort McCoy Wisconsin, General Site Map North Fort Sheet 3a of 13. Office of the Facilities Engineer, Bldg. T-2160. Original January -11-1965; Revision #11 June-4-1976.

Buildings and Structures Descriptions, from box marked "Save Historical"; Building T-2145 (Meatlocker), Fort McCoy, Original typed entries, undated.

Equipment Records, from file marked "Equipment Records"; Building T-2145 (Meatlocker), Fort McCoy, Original typed entries, undated.

"Historical Summary", typescript summary of the history of Camp McCoy prepared by the Public Affairs Office, Fort McCoy n.d., ca. 1985, p. 6.

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Lenore Fine and Jesse A. Remington, *The Corps of Engineers: Construction in the United States*. [volume in the series, *United States Army in World War II: The Technical Services*] (Washington, D.C.: Office of the Chief of Military History, United States Army), pp. 349.

Office of the Area Engineer, Camp McCoy, Wisconsin. "Camp McCoy Project--General Layout Plan No. 6150-1-L, May 23, 1942. Original blueline print in map file cabinet Building T-2145 "Meatlocker".

Post Engineer Office Historical Data, Document dated 15, January 1946, on file Building T-2145 "Meatlocker", Fort McCoy, Wisconsin

Real property records file; Building T-2160, Fort McCoy, Wisconsin. Also see original Real Property Record cards filebox in Building T-2145 "Meatlocker", Fort McCoy, Wisconsin.

"To Condemn 9600 acres for McCoy," *Sparta Herald*, February 9, 1942, p. 1.

Unmarked wooden File Box, Building T-2145, "Meatlocker", Fort McCoy, Wisconsin. File contains 4x5 cards listing buildings and assignees.

C. Likely Sources Not Investigated:

1. Documentary: Information on the firm charged with the construction of Building T-1463 may be available. Additional data may be available in the National Archives on George E. Bergstrom and the other architects who produced and revised the 800 series Standard Drawings.
2. Oral History: Interviews could be conducted with personnel involved in the construction of the Motor Repair Shop at Fort McCoy and the military records could be searched for personnel who may have worked at the shop.

D. Supplemental Materials:

1. The original "As Built" drawings for Building T-1463 are filed in Building T-2111, at Fort McCoy, Wisconsin. Standard plans for the 800 series MRS-1 are available from the National Archives.

Prepared by: James A. Glass Ph.D.
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and

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Keith Landreth, Richard Hayes
Associate Investigators
CERL Phase - Fort McCoy Project
December 1988

PART IV. PROJECT INFORMATION

The documentation of Fort McCoy was undertaken by the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) of the National Park Service, Robert J. Kapsch, chief, during the summer of 1988. The project was sponsored by the United States Army, Environmental Office, Colonel Ronald G. Kelsey, chief, with the assistance of Constance W. Ramirez, Historic Preservation Officer for the U.S. Army. Local sponsorship was provided at Fort McCoy by the base Commander, Colonel Sorensen, and by Al Balliett and Marvin Westenburg of the Environmental Division; John Calvert, Engineering Planning and Services Division; and Robert Wells, Real Property. The project was managed through the HABS/HAER WASO office by John A. Burns, architect, and project leader and Catherine Crawford, HABS historian. The documentation was undertaken at the HABS/HAER field office at Fort McCoy by James Glass, HABS/HAER, and by Keith Landreth, U.S. Army Construction Engineering Research Laboratory (USACERL), Champaign, Illinois. Large-format photography was done by Martin Stupich.

NOTES:

1. Basic Information Map, Fort McCoy Wisconsin, General Site Map North Fort Sheet 3a of 13. Office of the Facilities Engineer, Bldg 2160. Original January -11-1965; Revision #11 June-4-1976.
2. Buildings and Structures Descriptions, from box marked "Save Historical"; Building 2145 (Meatlocker), Fort McCoy, Original typed entries, undated.
3. Completion label appended to Record Drawing N 800-959. "As Built" envelope #196, Building 2111, Fort McCoy, Wisconsin.
4. Real property records file; Building 2160, Fort McCoy, Wisconsin. Also see original Real Property Record cards filebox in Building 2145 "Meatlocker", Fort McCoy, Wisconsin.
5. Lenore Fine and Jesse A. Remington, *The Corps of Engineers: Construction in the United States* [volume in the series, United States Army in World War II: The Technical Services] (Washington, D.C.: Office of the Chief of Military History, United States Army) pp 349.
6. "To Condemn 9600 acres for McCoy," *Sparta Herald*, February 9, 1942, p.1, c. 8.

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7. Office of the Area Engineer, Camp McCoy, Wisconsin. "Camp McCoy Project--General Layout Plan No. 6150-1-L, May 23, 1942. Original blue-line print in map file cabinet building 2145 "Meatlocker".
8. "As Built" file #196, Building 2111, Fort McCoy, Wisconsin. Also see 800 series standardized drawings 800-959, 800-960, 800-961, 800-962, 800-963, 600-964, 800-965, 800-966, 800-967, 800-967.1, and 800-968 in map file, Building 2145 "Meatlocker", Fort McCoy, Wisconsin.
9. Real Property Records, Building 2160, Fort McCoy, Wisconsin.
10. "As Built" file #196, Building 2111, Fort McCoy, Wisconsin.
11. "File entitled "Equipment Records", building 2145 "Meatlocker", Fort McCoy, Wisconsin.
12. Real Property Records, Building 2160, Fort McCoy, Wisconsin.
13. Drawing Number 47-018-568, Truss Repair Bldg. 1463. "As Built" file #196, Building 2111, Fort McCoy, Wisconsin, Fort McCoy, Wisconsin.
14. Real Property Records, Building 2160, Fort McCoy, Wisconsin.
15. Post Engineer Office Historical Data, Document dated 15, January 1946, on file Building 2145 "Meatlocker", Fort McCoy, Wisconsin.
16. Diane Wasch and Perry Busch, (draft) History of the Design and Construction of Temporary World War II Buildings by the War Department. Historic American Buildings Survey, National Park Service, Washington, D.C. 1988 pp 42;47.
17. Post Engineer Office Historical Data, Document dated 15, January 1946, on file Building 2145 "Meatlocker", Fort McCoy, Wisconsin.
18. Ibid.
19. "Historical Summary", typescript summary of the history of Camp McCoy prepared by the Public Affairs Office, Fort McCoy nd., ca. 1985, p 6.
20. Unmarked wooden File Box, building 2145, "Meatlocker", Fort McCoy, Wisconsin. File contains 4x5 cards listing buildings and assignee's.
21. Drawing Number 47-018-568, Truss Repair Bldg. 1463. "As Built" file 0196, Building 2111, Fort McCoy, Wisconsin, Fort McCoy, Wisconsin.
22. Drawing dated 7-5-1951 by The Viking Automatic Sprinkler Company in. "As Built" file 4196, Building 2111, Fort McCoy, Wisconsin.
23. Drawing dated 7-5-1951 by The Viking Automatic Sprinkler Company in. "As Built" file #196, Building 2111, Fort McCoy, Wisconsin, Fort McCoy, Wisconsin.
24. "As Built" file #196, Building 2111, Fort McCoy, Wisconsin, Fort McCoy, Wisconsin.
25. Basic Information Map, Fort McCoy Wisconsin, General Site Map North Fort Sheet 3a of 13. Office of the Facilities Engineer, Bldg 2160. Original January -11-1965; Revision #11 June-4-1976.